

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-21 (canceled)

Claim 22 (currently amended): ~~An expression vector~~ A recombinant construct comprising a polynucleotide encoding an AT hook transcription factor polypeptide, wherein the polynucleotide hybridizes to the complement of a nucleic acid sequence comprising SEQ ID NO: 13 under stringent conditions;

wherein said stringent conditions comprise 6X SSC at 65°C and two wash steps of 10 to 30 minutes with ~~6x SSC and 65°C~~ about 0.2x SSC, 0.1% SDS at 65°C or greater stringency; and

wherein the AT hook transcription factor polypeptide comprises a conserved domain that is at least 65% identical in its amino acid sequence to amino acids 106-201 of SEQ ID NO: 14

~~a transformed plant that comprises the expression vector and overexpresses the polypeptide has greater biomass or more tolerance to water deficit than a control plant.~~

Claim 23 (canceled)

Claim 24 (currently amended): The ~~expression vector~~ recombinant construct of claim 22, wherein the stringent conditions comprise two wash steps of 0.1X SSC, 0.1% SDS at 65° C for 30 minutes.

Claim 25 (currently amended): The ~~expression vector~~ recombinant construct of claim 22, wherein the transcription factor polypeptide comprises a conserved domain that is at least 63% identical in its amino acid sequence to ~~a second conserved domain consisting of~~ amino acids 106-201 of SEQ ID NO: 14.

Claim 26 (currently amended): The ~~expression vector~~ recombinant construct of claim 22, wherein the expression vector is comprised within a host plant cell.

Claim 27 (currently amended): A transgenic plant comprising a recombinant polynucleotide ~~comprising a nucleotide sequence~~ encoding an At-hook transcription factor polypeptide, ~~wherein:~~

~~the recombinant polynucleotide hybridizes to a nucleic acid sequence comprising SEQ ID NO: 13 under stringent conditions;~~

~~said stringent conditions comprise two wash steps of 10 to 30 minutes with 6x SSC and 65° C or greater stringency; and~~

~~the transgenic plant overexpresses the polypeptide and has greater biomass or more tolerance to water deficit conditions than a control plant~~

wherein the At-hook transcription factor polypeptide comprises an At-hook domain, and a second conserved domain that is at least 90% identical in its amino acid sequence to amino acids 106-201 of SEQ ID NO: 14.

Claim 28 (currently amended): The transgenic plant of claim 27, wherein the ~~stringent conditions comprise two wash steps of 0.5X SSC, 0.1% SDS at 65° C for 10 to 30 minutes~~ transgenic plant overexpresses the At-hook transcription factor polypeptide and has greater biomass than a control plant.

Claim 29 (currently amended): The transgenic plant of claim 27, wherein the ~~stringent conditions comprise two wash steps of 0.1X SSC, 0.1% SDS at 65° C for 30 minutes~~ transgenic plant overexpresses the At-hook transcription factor polypeptide and has more tolerance to water deficit conditions than a control plant.

Claim 30 (currently amended): The transgenic plant of claim 27, wherein the transcription factor polypeptide comprises a conserved domain that is at least ~~63%~~ 95% identical in its amino acid sequence to ~~a second conserved domain consisting of~~ amino acids 106-201 of SEQ ID NO: 14.

Claim 31 (currently amended): The transgenic plant of Claim 27, wherein ~~the recombinant polynucleotide comprises a~~ expression of the AT-hook transcription factor polypeptide is regulated by a constitutive, inducible, or tissue-specific promoter ~~operably linked to said nucleotide sequence.~~

Claim 32 (currently amended): A method for producing a transgenic plant having increased biomass as compared to a control plant, the method steps comprising:

~~(a) providing an expression vector comprising:~~

~~(i) a polynucleotide sequence comprising a nucleotide sequence that hybridizes to a nucleic acid sequence comprising SEQ ID NO: 13 under stringent conditions;~~

~~said stringent conditions comprise two wash steps of 10 to 30 minutes with 6x SSC and 65° C or greater stringency; and~~

~~(ii) one or more regulatory elements flanking the polynucleotide sequence, said one or more~~

~~regulatory elements controlling expression of said nucleotide sequence in the transgenic plant~~

(a) providing a recombinant construct comprising:

(i) a nucleic acid that encodes an AT-hook transcription factor polypeptide having an At-hook domain and a second conserved domain at least 90% identical in its amino acid sequence to amino acids 106-201 of SEQ ID NO: 14; and

(ii) one or more regulatory elements that control expression of the AT-hook transcription factor polypeptide;

(b) introducing the ~~expression vector~~ recombinant construct into a plant cell; and

(c) growing the plant cell into the transgenic plant, wherein the transgenic plant overexpresses [[an]] the AT-hook transcription factor polypeptide and has increased biomass as compared to the control plant.

Claim 33 (previously presented): The method of Claim 32, the method steps further comprising:

(d) selfing or crossing said transgenic plant with increased biomass with itself or another plant, respectively, to produce transgenic seed; and

(e) growing a progeny plant from the transgenic seed, thus producing a transgenic progeny plant having increased biomass as compared to the control plant.

Claims 34-35 (canceled)

Claim 36 (currently amended): The method of claim 32, wherein the transcription factor polypeptide comprises a conserved domain that is at least ~~63%~~ 95% identical in its amino acid sequence to ~~a second conserved domain consisting of~~ amino acids 106-201 of SEQ ID NO: 14.

Claim 37 (currently amended): A method for producing a transgenic plant having more tolerance to water deficit conditions ~~as compared to~~ than a control plant, the method steps comprising:

~~(a) providing an expression vector comprising:~~

~~(i) a polynucleotide sequence comprising a nucleotide sequence that hybridizes to a nucleic acid sequence comprising SEQ ID NO: 13 under stringent conditions;~~

~~said stringent conditions comprising two wash steps of 6x SSC and 65° C or greater stringency for 10 to 30 minutes; and~~

~~(ii) one or more regulatory elements flanking the polynucleotide sequence, said one or more~~

~~regulatory elements controlling expression of said nucleotide sequence in the transgenic plant~~

(a) providing a recombinant construct comprising:

(i) a nucleic acid that encodes an AT-hook transcription factor polypeptide having an At-hook domain and a second conserved domain at least 90% identical in its amino acid sequence to amino acids 106-201 of SEQ ID NO: 14; and

(ii) one or more regulatory elements that control expression of the AT-hook transcription factor polypeptide;

(b) introducing the expression vector into a plant cell; and

(c) growing the plant cell into the transgenic plant, wherein the transgenic plant overexpresses ~~[[an]]~~ the AT-hook transcription factor polypeptide and has more tolerance to water deficit conditions as compared to the control plant.

Claim 38 (previously presented): The method of Claim 37, the method steps further comprising:

(d) selfing or crossing said transgenic plant with more tolerance to water deficit conditions with itself or another plant, respectively, to produce transgenic seed; and

(e) growing a progeny plant from the transgenic seed, thus producing a transgenic progeny plant having more tolerance to water deficit conditions as compared to the control plant.

Claims 39-40 (canceled)

Claim 41 (currently amended): The method of claim 37, wherein the transcription factor polypeptide comprises a conserved domain that is at least ~~[[63%]]~~ 95% identical in its amino acid sequence to ~~a second conserved domain consisting of~~ amino acids 106-201 of SEQ ID NO: 14.

Claim 42 (currently amended): A transgenic seed comprising the ~~expression vector~~ recombinant construct of Claim 22.

Claim 43 (new): A recombinant construct comprising a polynucleotide encoding an AT hook transcription factor polypeptide, wherein the polynucleotide comprises SEQ ID NO: 13.

Claim 44 (new): The recombinant construct of claim 43, wherein the recombinant construct is comprised within a host plant cell.